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A LIST OF THE LAND BIRDS OF LAKE VALLEY,
CENTRAL SIERRA NEVADA MOUNTAINS,
CALIFORNIA.

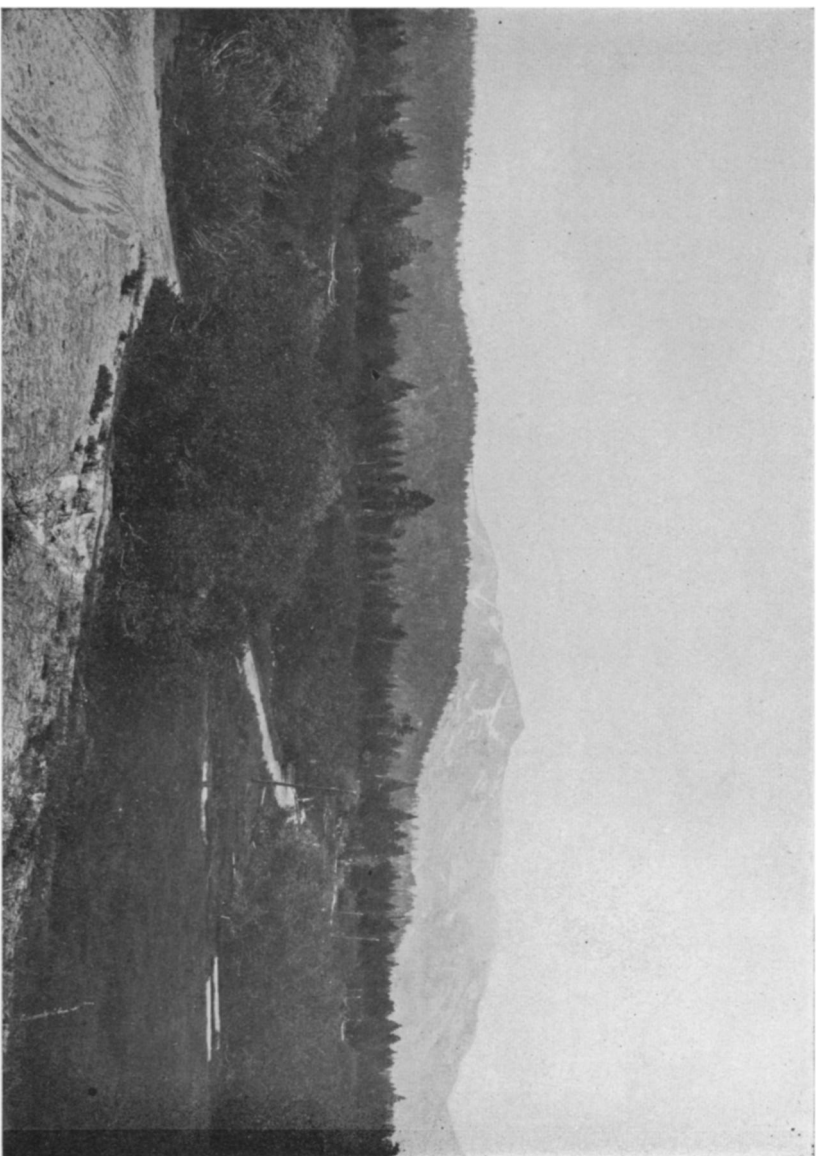
BY MILTON S. RAY.

Plates VIII and IX.

THE following notes are the result of two seasons I have spent in Lake Valley, — from June 4 to 20 in 1901, and from June 16 to July 3 in 1902. My brother William R. Ray has accompanied me, and in 1902 Olof Heinemann joined us. I had the pleasure of meeting Mr. Loren E. Taylor in 1901 and Messrs. Chester Barlow, Henry R. Taylor, W. W. Price, and F. M. Willard in 1902, at various points in the region, all of whom are well known workers in this locality. The observations of Messrs. Wilfred H. Osgood, R. H. Beck, and Forrest Hanford have also added a number of species to the list. Liberal extracts have been taken from the 'Land Birds of the Placerville-Lake Tahoe Stage Road' by Chester Barlow (Condor, Vol. III, No. 6).

A very small portion of Lake Valley lies in Nevada, as the State line turns a little north of here and runs southeast across the mountains. The valley is about 15 miles long and 8 miles wide. On the north it is bounded by Lake Tahoe, while on all other sides it is surrounded by rugged, snow-capped mountain ranges. The principal peaks are: Tallac on the west, rising to 9785 feet; further west and to the south snowy Pyramid attains 10,020 and Crystal 10,015 feet, while on the eastern range Job's and Freel's Peaks have an altitude of 10,637 and 10,900 feet respectively. Lakes are numerous, there being a score of them between Mount Tallac and Pyramid Peak at altitudes varying from 6400 to 8500 feet. Star Lake, the only one on the east, is one of the highest in the world, the altitude being about 9000 feet. It usually remains covered with a thick coat of ice until the end of June, and is a great resort for Clarke Nutcrackers and other birds of the Hudsonian Zone.

The altitude of Lake Valley is a little above that of Lake Tahoe, which is 6220 feet, and for the most part the valley is level,



Photographed by W. R. Ray.

LOOKING WEST FROM ROWLAND'S MEADOWS, SHOWING TRANSITION, CANADIAN, HUDSONIAN, AND ALPINE ZONES.

though hilly adjacent to the mountain sides. It presents six distinct types of country.

(1.) The major portion is sandy, more or less thickly wooded with pine, tamarack, sagebrush and the broad-leaved wild sunflower. The majority of the timber on the eastern half is second growth.

(2.) There are also large areas of fertile grassy meadows along the numerous streams whose banks are fringed with willow, aspen and other trees.

(3.) At the mouth of the Little Truckee River, called Rowlands, is a marsh extending about three miles along the lake shore and from one to three miles inland. The above three types of country lie in the Transition Zone.

(4.) Portions of the hillsides are very rocky, sparsely wooded, but thickly covered with the thorny buck brush, manzanita, and wild beach. This district lies in the Canadian Zone.

(5.) On the mountain sides are dense forests of massive firs, balsam, pine, and tamarack. Picturesque lakes, rushing torrents, and foaming waterfalls characterize this portion of the country, the lower part of which belongs to the Canadian Zone, and above 8000 feet to the Hudsonian Zone.

(6.) The last type is the barren rocky areas above the timber line on the various mountain peaks, or the Alpine Zone.

The principal points of the region are:

	Altitude.
Lakeside (State Line)	6220
Bijou (P. O.) 2 miles west of Lakeside, on lake shore	6220
Rowlands, 4 " " " " " " "	6220
Tallac (P. O.) 7 " " " " " " "	6220
Glen Alpine, 14 " " " " a rocky gorge	6700
Sierra House, 2½ miles southeast of Lakeside, in Lake Valley	6300
Meyer's Station, 7 " south " " " " "	6400
Summit, 12 " southwest " " on the ridge	7600
Phillip's Station 14 " " " " " " "	6900

The weather in the valley is erratic. In summer magnificent thunderstorms, followed by a downpour of rain, hail, and occasionally light snow, are common while in a few hours the sun will be shining and the sky clear. The climate in general, however, is cold in the morning and evening and rather warm at midday.

Bird life in general is varied and numerous, in striking contrast

to places west of the summit, like Echo, Slippery Ford, and River-ton. This is no doubt due to the fact that species of many zones occur here, owing to the diversified character of the country. The breeding season is very early for the altitude of 6220 feet, it being about the same as Slippery Ford, west of the summit, at 4000 feet elevation.

It is a noticeable fact that even 500 or 1000 feet make a difference in nesting dates, allowing for the usual variation. For instance, at Bijou on Lake Tahoe, on June 7, eggs of *Junco hyemalis thurberi* were well along in incubation, and by June 15 most nests contained young. At Phillip's Station eggs slightly incubated were found June 16, and on July 3, 4 and 5 we observed young birds flying about at Wright's Lake and various other places on this mountain plateau; while at 9000 feet, on July 6, while ascending Pyramid Peak, two nests of eggs were found in which incubation had just commenced. The lateness of the season also delays nesting, but only of certain species, it having little effect on birds breeding in protected situations, like woodpeckers, bluebirds and chickadees.

LIST OF SPECIES.¹

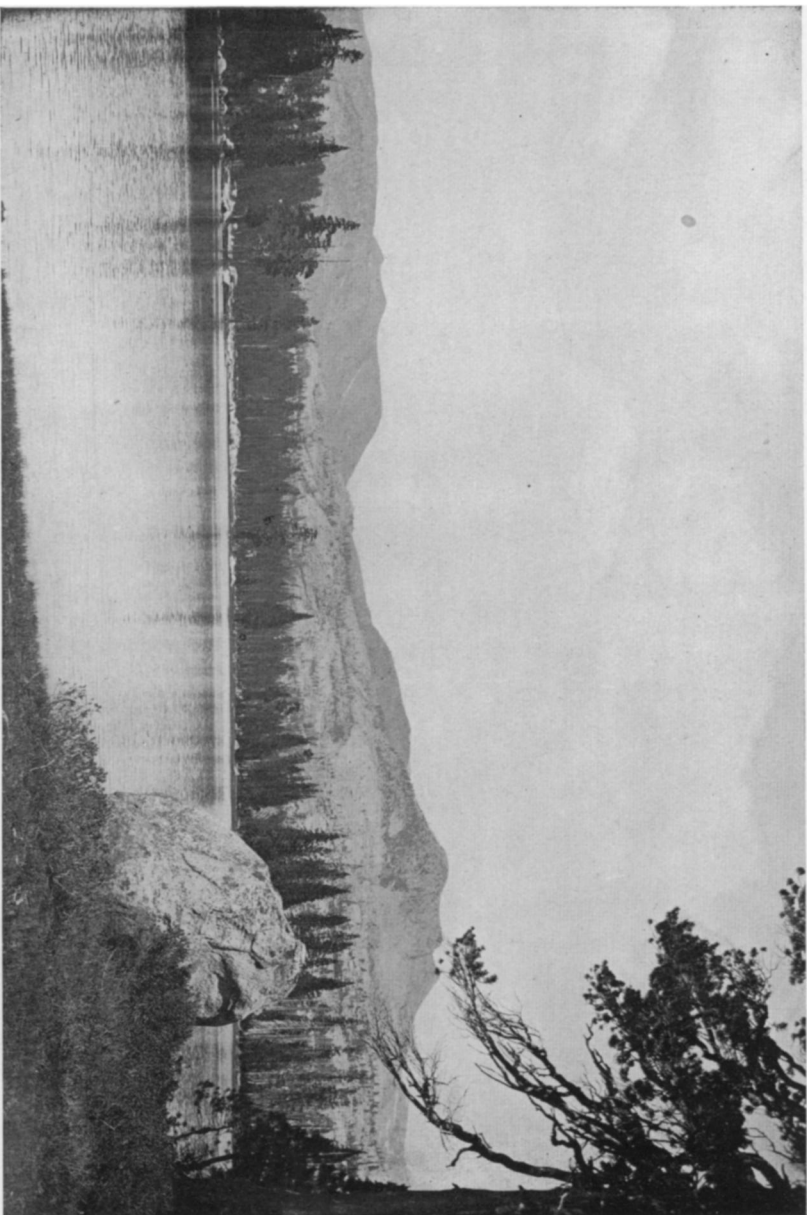
17. *Oreortyx pictus plumiferus*. PAINTED PARTRIDGE.—Rather scarce on the floor of the valley although a number were seen near Tallac in June, 1901. It is common on the mountain sides, especially on the road to Star Lake.

18. *Dendragapus obscurus fuliginosus*. SOOTY GROUSE.—This bird is more often heard than seen. It is not uncommon on the ranges surrounding Lake Valley. On July 4, 1902, on the road to Pyramid Peak, a parent with young about the size of a Valley Quail, was flushed from the brush along the road. In her solicitude for the young she could have been hit with a driving whip. Mr. Price states they remain in these high altitudes all the year, and also records a set of seven eggs, well advanced in incubation, found at Glen Alpine, June 7, 1900.

19. *Zenaidura macroura*. MOURNING DOVE.—Common, especially about Bijou. I am inclined to think these birds do not breed here until late in July, as notwithstanding their abundance I found no nests.

¹ Asterisk signifies skin taken.

Sixteen water birds have been listed, so this list starts with No. 17.



Photographed by O. Heinemann.

WRIGHT'S LAKE, NORTHWEST OF PYRAMID PEAK.

20. *Cathartes aura*. TURKEY VULTURE.—A common species in the valley; a number were seen almost every day.

21. *Accipiter velox rufilatus*. WESTERN SHARP-SHINNED HAWK.—Not uncommon about Lake Valley; in fact all the birds of prey were far more numerous here than at any point on the trip.

22. *Accipiter cooperi*. COOPER HAWK.—Observed about Glen Alpine Springs by Mr. W. W. Price, and also at the base of Pyramid Peak, where, he states, they no doubt breed.

23. *Accipiter atricapillus striatulus*. WESTERN GOSHAWK.—Seen near Pyramid Peak in June and July, 1897, by Mr. Price where, he states, they undoubtedly breed.

24. *Buteo borealis calurus*. WESTERN RED-TAILED HAWK.—The most common raptore in the region. I noticed it every day on various rambles. A field glass is very handy for identifying these birds when at a great height.

25. *Aquila chrysaëtos*. GOLDEN EAGLE.—Observed about Glen Alpine by Mr. Price, and about Pyramid Peak and Mt. Tallac, where it nests on rocky ledges.

26. *Falco sparverius deserticolus*.* DESERT SPARROW HAWK.—This bird is rather scarce in Lake Valley. During the first week of June, 1901, one was shot on the Bijou camp grounds. Seen about Mt. Tallac and at Pyramid Peak by Mr. Price, where he found a nest at 9000 feet on July 5, 1897.

27. *Nyctala acadica*. SAW-WHET OWL.—A single specimen, shot by Mr. A. S. Bunnell at Glen Alpine in July, 1898.

28. *Bubo virginianus saturatus*. DUSKY HORNED OWL.—We saw a Horned Owl, probably this variety, near Forni's, at the base of Pyramid Peak, on July 5, 1902.

29. *Glaucidium gnoma*. PIGMY OWL.—Mr. Price shot three at Glen Alpine on August 10, 1900; one an adult female, the others young of the year.

30. *Ceryle alcyon*. BELTED KINGFISHER.—Fairly common along the lake shore between Bijou and Rowlands, and it probably nests in the sandy bank which forms an unbroken line between these two points.

31. *Dryobates villosus hyloscopus*. CABANIS WOODPECKER.—Mr. L. E. Taylor secured two specimens at Fallen Leaf Lake on Sept. 2, 1901. I also noticed this bird occasionally about Rowlands.

32. *Xenopicus albolaryatus*. WHITE-HEADED WOODPECKER.—This woodpecker and *Colaptes cafer collaris* are the only species of this family which can be really called common in Lake Valley. The male is an attractive bird, with his glossy black coat and white head. They are especially fond of the grub of a large beetle found in newly-dead tamaracks, and as these are also the principal bait used for catching the famous Tahoe trout, the experienced fisherman looks for a trunk this bird has recently tapped. The bird breeds commonly in Lake Valley, nesting in dead pines and tamaracks from 5 to 25 feet up. By June 1 most nests contained young in various stages.

33. *Picoides tenuirostris*. SIERRA THREE-TOED WOODPECKER. — Mr. W. W. Price records two young shot at the head of Glen Alpine gorge July, 1898, and a pair near Pyramid Peak, August, 1896.

34. *Sphyrapicus thyroideus*. WILLIAMSON SAPSUCKER. — Noted as nesting at the base of Pyramid Peak by Mr. Chester Barlow. Mr. L. E. Taylor collected an immature female at Cascade Lake on August 8.

35. *Ceophloeus pileatus abieticola*. NORTHERN PILEATED WOODPECKER. — Mr. Taylor collected a male at Gilmore Springs, near Tallac, Sept. 2, 1901.

36. *Melanerpes torquatus*. LEWIS WOODPECKER. — Mr. R. H. Beck records it as common and breeding about Bijou in the summer of 1896. Personally I have not observed it in the region.

37. *Colaptes cafer collaris*. RED-SHAFTED FLICKER. — A common species, nesting at various heights in dead pines in Lake Valley and on the mountain sides. All nests examined during June, 1901 and 1902, contained young.

38. *Phalænoptilus nuttallii californicus*. DUSKY POORWILL. — Mr. Taylor collected a female at Meyer's Station on Sept. 2, 1901.

39. *Chordeiles virginianus*. NIGHTHAWK. — The Nighthawk is extremely common, and only on cloudy days when they fly low is one able to realize the abundance of these birds. I noticed at least 100 in one band on the road to Star Lake, darting back and forth in what was evidently a good feeding ground. A single set of two eggs is recorded by Mr. Price as being found on a bare rock near Suzy Lake late in July, but where the thousands of Nighthawks breed is still a mystery. I have never found a nest nor an indication of one, and probably the reason is the birds do not start to breed until the end of July or later.

40. *Calypte anna*. ANNA HUMMINGBIRD. — Mr. Price records a female, evidently a straggler, as being shot near Pyramid Peak, July, 1896.

41. *Selasphorus platycercus*. BROAD-TAILED HUMMINGBIRD. — Recorded as a rather rare summer visitant at Lake Tahoe in Grinnell's 'Check-list of California Birds.'

42. *Selasphorus rufus*. RUFOUS HUMMINGBIRD. — Mr. W. W. Price notes this bird as common and nesting about Glen Alpine. I also saw it occasionally at Bijou.

43. *Contopus borealis*. OLIVE-SIDED FLYCATCHER. — This flycatcher is not abundant in Lake Valley; I noticed it occasionally at Rowlands, but more often on the mountain sides among the heavy timber.

44. *Contopus richardsoni*. WESTERN WOOD PEWEE. — A very common bird throughout the region. I found a freshly built nest on June 7, 1901, near Lake Tahoe at 30 feet up in a dead tree near a small stream; another at Bijou, on June 20, 1901, placed on a branch of a small tamarack, 15 feet up, with three fresh eggs. On June 18, 1902, near Bijou, a nest was found saddled on a tamarack branch, 12 feet up, and also contained three fresh eggs; and another nearby was situated in a tamarack 40 feet up with the same complement. The last two nests, now before me, are

similar in construction and material, being externally composed of grasses, weed fibres, bits of bark and string, and lined with horse-hair and various bird feathers. In one the brilliant yellow feathers of the Western Tanager are conspicuous. This nest measures 4 inches across, the cavity being 2 by 1½ inches deep. The most interesting nest of this bird I ever saw was at Echo on June 15, 1902. It was on a small dead branch hanging from the main trunk of a giant pine, fully 75 feet up. The nest and bird were so small at this great height that they could be scarcely seen, and my friend Olof Heinemann, who was with me, gazed for a number of minutes before he could perceive it. The female was observed whirling round and round in the almost completed nest and presently flew off and returned with a bit of material which was carefully placed. Few can realize the time and patience required to build these, one of the most beautiful of all forest bird homes.

45. *Empidonax traillii*. TRAILL FLYCATCHER.—This bird is rather scarce; a single nest was found July 1, 1902, made of hemp fibres and grasses and laced to an upright fork of a willow beside a small stream near the Sierra House. It contained a single fresh egg, of the usual pale buff blotched with reddish brown. This is the highest altitude at which I have ever found this bird. At Buck's Ranch, Plumas County, elevation 5000 feet, I found a nest, which I collected with the parent, June 29, 1901, in a willow, 3 feet up, near a small brook. It contained four eggs in which incubation had just begun. The bird is evidently a late breeder, in fact, in this region all the flycatchers breed late.

46. *Empidonax hammondi*. HAMMOND FLYCATCHER.—Mr. Price states he has observed young of this species frequently about Pyramid Peak late in the summer.

47. *Otocoris alpestris merrilli*. DUSKY HORNED LARK.—On October 6, 1901, Mr. Taylor collected a female at Meyer's Station, and another near Lake of the Woods on October 9, at 8900 feet altitude.

48. *Pica hudsonica*. AMERICAN MAGPIE.—Common about Rowlands and in thickets along streams. I found numerous nests during the month of June containing full-grown young, but in most cases the young had already left. The nests were rough looking structures of sticks and all placed in willows from 7 to 20 feet up.

49. *Cyanocitta stelleri frontalis*. BLUE-FRONTED JAY.—Scarce on the floor of the valley but abundant on mountain sides. A nest found near Fallen Leaf Lake, placed on the branch of a small fir in plain view, 8 feet up, contained four large young on June 15, 1901. A late nest for this species was noted near Phillip's Station in a tamarack 15 feet up, which contained four small unfeathered young on July 3, 1902. When about the nest the jays are very quiet and drop their usual noisy ways.

50. *Nucifraga columbiana*. CLARKE NUTCRACKER.—This bird is not common in the valley, although the day we arrived, June 16, 1902, I saw a large band of Nutcrackers near Rowlands, and noticed others occasionally in the pine woods during my stay. They are abundant at high altitudes, as Star Lake and Pyramid Peak.

51. *Xanthocephalus xanthocephalus*. YELLOW-HEADED BLACKBIRD.—Thousands of these birds nest every year at Rowland's marsh, in the thick tules over, usually, a considerable depth of water (4 to 10 feet). Freshly built nests, eggs in all stages of incubation, and fully fledged young were found during the month of June. Sets contained from two to five eggs. The nests were compactly made and well fastened to the tules, but when the young become grown the nest is frequently tipped to one side, precipitating the juveniles into the water. In one nest, in a rather sparse tule patch, the young birds were just on the verge of falling out, and on our approach one of them tumbled into the water. We replaced the young one in the nest, when another repeated the act, and another, until we finally gave up attempting to put them back. We paddled a short distance away and watched the nest; soon the occupants, probably none the worse for their immersion, decided to set forth again. All of them succeeded in keeping afloat until they clambered up in the tules with an agility which surprised me when the helplessness of most young birds is considered.

52. *Agelaius phœniceus neutralis*. * SAN DIEGO RED-WINGED BLACKBIRD.—This species outnumbers all other birds in the marsh and it is strange it should have been overlooked by previous workers (it not being recorded in Mr. Barlow's list). I shot seven red-winged blackbirds at random and all proved to be this species, as were all the red-wings I observed. On every trip to the marsh I found numberless nests, placed usually in small willows just above the water or attached to marsh grass. All sorts and conditions of eggs and young were found during June. On account of the unusually heavy snowfall in 1901, the lake rose rapidly in June, flooding hundreds of nests of this bird. Many were deserted, some containing eggs and others drowned young.

53. *Agelaius gubernator californicus*. BICOLORED BLACKBIRD.—Mr. Beck observed this bird nesting in the marsh near Bijou (presumably Rowlands) in June, 1896.

54. *Agelaius tricolor*. TRICOLORED BLACKBIRD.—Observed nesting on the shores of Lake Tahoe by Mr. Beck who collected a set of five eggs on June 12, 1896. Personally I have never seen either this or the preceding species and do not think they can be considered by any means common.

55. *Sturnella magna neglecta*. WESTERN MEADOWLARK.—Not uncommon in the broad meadows about Lakeside, Bijou, and Rowlands. They were rather shy, and I did not secure a specimen. To me the song seemed somewhat different from that heard in our coast valleys but a bird shot at Meyer's Station on Sept. 30, 1901, by Mr. Taylor, is recorded as this species, so I am, no doubt, mistaken.

56. *Scolecophagus cyanocephalus*. BREWER BLACKBIRD.—Common about Rowland's marsh and various meadows throughout the valley. I found nests in a variety of situations; some were placed in a depression in the damp ground in meadows, some in willows a foot or less above the

water, like those of the Red-wing, and others a few feet up in tamarack saplings. All these situations are quite at variance with those selected on the coast, which is generally in a pine or evergreen about 20 feet up. I noticed in June, 1901, large numbers of these birds nesting in the sagebrush near Carson, Nevada, owing to the absence of trees; but the most unusual nests were a number found in cavities of old piles over the water at Bijou and Rowlands. One of these, at the latter place, was above 20 feet of water and 50 yards from the shore. It held five large young on June 29, 1902, but could not be photographed successfully owing to the lack of contrast, the birds, nest and pile all being dark requiring a time exposure impossible in a canoe. As with the other blackbirds, the breeding season extends through June, although the majority of nests had young by June 15.

57. *Coccothraustes vespertinus montanus*. WESTERN EVENING GROSBEAK.—Observed by Mr. Barlow at Echo, just west of the summit, on June 14, 1901.

58. *Pinicola californica*. CALIFORNIA PINE GROSBEAK.—Mr. Barlow saw this bird at Forni's, at the base of Pyramid Peak, on June 9, 1900.

59. *Carpodacus purpureus californicus*. CALIFORNIA PURPLE FINCH.—Collected at Glen Alpine on June 24, 1900, by Mr. Price, who states it is rare on the east slope of the range.

60. *Carpodacus cassini*. CASSIN PURPLE FINCH.—This purple finch is found, though, not abundantly, in Lake Valley. It was common about Wright's Lake and Forni's in the Pyramid Peak region in July, 1902. At Bijou, June 10, 1901, I located a nest in a massive pine over 100 feet up and so far out on the branch as to be inaccessible. A few days later I located a nest near Lakeside in a similar situation.

61. *Carpodacus mexicanus frontalis*. HOUSE FINCH.—Extremely common, especially about Bijou. I am inclined to think the abundance of this bird has been attributed by error to *Carpodacus cassini*. I found numerous nests in small pines and tamaracks, from six to fifteen feet up, and placed in the usual careless manner with little or no attempt at concealment. Here the birds are late breeders, nest building commencing in the latter part of June, and in most cases no eggs were deposited until July 1 or later. Most sets consisted of three eggs, of the usual white ground color with a faint tinge of bluish, lightly spotted.

62. *Loxia curvirostra bendirei*. SIERRA CROSSBILL.—Rare. Mr. Taylor collected a female near Meyer's Station Sept. 1, 1901, and it has been seen on two occasions by Mr. Price, once near Pyramid Peak, and at Glen Alpine.

63. *Leucosticte tephrocotis*. GRAY-CROWNED LEUCOSTICTE.—Observed by various writers on the summit of Pyramid Peak. On our visit, July 5, 1902, numerous leucostictes were seen flying about the boulders and on the broad patches of snow. I patiently watched a number for about half an hour with a field glass but failed to notice any indication of a nest in the vicinity. In the meantime my brother and Heinemann

had already started back for camp and, desiring to make a short cut, went down the slope where it is very precipitous. Here, after some distance, it became difficult to advance or retreat. A little distance away a pair of leucostictes was observed in a rocky ledge. The pair was watched, and soon one flew into a long, winding, impenetrable cavity among the huge granite slabs of the ledge. On their approaching the spot the bird flew out and began hopping about showing some anxiety. There is little doubt that the birds had a nest there but it was impossible to reach it.

64. *Astragalinus psaltria*. ARKANSAS GOLDFINCH. — A straggler was shot by Mr. Price on the summit of Mount Tallac, August, 1892.

65. *Spinus pinus*. PINE SISKIN. — Observed commonly by Mr. Price at the head of Glen Alpine gorge where he has taken young in July and August.

66. *Zonotrichia leucophrys*.* WHITE-CROWNED SPARROW. — This sparrow is found sparingly about Bijou and Lakeside in Lake Valley, but is abundant on the summit and about Pyramid Peak. It is a pleasing songster, the song being similar to that of *Z. l. nuttalli*, but the ending is more abrupt. I have heard the male singing as late as nine o'clock at night and at the first signs of daybreak. On June 10, 1901, scarcely fifty yards from camp, my brother stumbled on a nest well concealed among the grass at the foot of a small willow. We had passed this spot a number of times but the parent had been so alert as to steal off unnoticed. The eggs, four in number, were fresh and measured .87 × .62, .86 × .62, .83 × .62, .72 × .59. They are greenish white with numerous small spots of reddish brown. The nest is of weed stems and grasses, lined with horse-hair. It measures 4½ inches, over all, while the cavity is 2½ by 2 inches deep. I took the parents with this nest and the male, with a broken wing led me a merry race over the meadow, as I had used the last shell in my auxiliary barrel.

67. *Zonotrichia leucophrys gambeli*. INTERMEDIATE SPARROW. — Mr. Taylor secured three specimens about Glen Alpine and one at Meyer's Station during the latter half of September, 1901, while in its migration from the north.

68. *Spizella socialis arizonæ*.* WESTERN CHIPPING SPARROW. — Very common throughout the valley, nesting in pine and tamarack saplings, usually five or six feet up. The nests are all very similar — of grasses and vegetable fibres lined with horse or cow-hair, or both. They are placed insecurely, owing to the character of the trees, near the end of the branch. In Yosemite Valley, in the summer of 1898, I found most nests placed in willows where they had a better foundation. The reason why the birds do not select the willow as a nesting site here is probably because they are not fully leaved when the breeding season commences. Some nesting dates are as follows: June 10, 1901, Bijou, four eggs, fresh; June 11, 1901, Bijou, four, incubation just begun; June 11, 1901, Bijou, four small young; June 17, 1902, Bijou, four eggs, incubation just begun; July 2, 1902, Bijou, four fresh eggs.

69. *Spizella breweri*. BREWER SPARROW. — Several were shot near Meyer's Station in July, 1896, by Mr. Wilfred Osgood. I saw what I took to be this bird on the brush covered rocky slopes on the east side of the valley, but did not notice it about Bijou.

70. *Junco hyemalis thurberi*. * SIERRA JUNCO. — A common summer resident; frequents the fertile meadows and localities adjacent to streams more than the dry, sparsely wooded sections of the valley. My first nest was found on June 7, 1901, containing four eggs that were just blowable. This nest was completely hidden by the wide drooping leaves of a wild sunflower, and was situated on the bank of an irrigating ditch, two miles over the State line in Nevada. My prettiest set of eggs was taken a long distance west of the summit, one mile west of Maple Grove, near River-ton, on June 13, 1902. While driving along the road we flushed a junco from a dripping mossy bank just above the road. The nest was very damp, and well lined with coon hair. The eggs, three in number, were fresh, and heavily marked in a wreath around the larger end with great blotches of rich chestnut red and lavender. Near Phillip's Station, on June 16, 1902, a nest was discovered on the ground, flush with the surface, with four eggs of the lightly marked type, in which incubation had just begun. A curious nest was noted at Bijou in an empty tin can. It had held two eggs, but these had rolled out on the ground and the birds had deserted it. At an altitude of about 9000 feet, while climbing Pyramid Peak, on July 5, 1902, I collected a nest with three partly incubated eggs placed under the projecting ledge of a great boulder. Another was found with four eggs, in which incubation had also just begun. It was located in a similar situation and appears in the photograph by my brother who found it. All the above nests are similar in construction, being made of grasses and weed stems and some are lined with horse or other hair.

71. *Melospiza cinerea montana*. MOUNTAIN SONG SPARROW. — A rather common bird about Rowlands and also seen occasionally in thickets along streams, where a nest was found on the ground June 20, 1902, containing five badly incubated eggs. It was so securely hidden by a tall broad-leaved plant that I would have passed it by unnoticed had not the parent fluttered off at my feet. On June 22, 1902, I found a nest at Rowland's Marsh in a willow, over deep water, containing four small young.

72. *Melospiza lincolni*. LINCOLN SPARROW. — On June 7, 1902, Mr. Forrest Hanford secured a specimen on a meadow at 7,200 feet elevation, where it was probably about to breed.

73. *Passerella iliaca unalaschensis*. TOWNSEND SPARROW. — Mr. Price records six sparrows of this form taken on Silver Creek, within three miles of Pyramid Peak, in September, 1896. One specimen was very light colored and referable to the Fox Sparrow rather than to *P. i. unalaschensis*.

74. *Passerella iliaca megarhyncha*. THICK-BILLED SPARROW. — Rather abundant on the bushy, rocky hillsides in the eastern part of Lake Valley, where it delivers its sweet song from some patch of brush or jagged rock. I was unable to locate any nests.

75. *Oreospiza chlorura*. GREEN-TAILED TOWHEE.—Mr. Taylor secured two specimens in September at Glen Alpine Springs.

76. *Zamelodia melanocephala*. BLACK-HEADED GROSBK. — I noticed it on a ridge east of Fallen Leaf Lake where a male was pouring forth his clear, joyous notes from the top of a fir.

77. *Cyanospiza amœna*. LAZULI BUNTING.—A single specimen was shot in September, 1896, on Silver Creek, at about 7000 feet, by Mr. Price, who states it is rare above 4500 feet.

78. *Piranga ludoviciana*. WESTERN TANAGER.—The most brilliantly colored bird in the region. While it is fairly abundant in Lake Valley, it is more common in the heavy timber on the mountain sides. A nest was found June 11, 1901, on the Bijou camp grounds in a tamarack only 15 feet up (misprinted 25, Osprey, Vol. V, No. 8), containing five fresh eggs. Another, at Fyffe, 38 miles west of the summit, was 50 feet up in a pine, and held four partly incubated eggs. The average height, however, is about 30 feet. The nests are frail grosbeak-like structures of rootlets.

79. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Common; forty nests were found under the eaves of an old saloon built over the water at Rowlands. Eggs and young in all stages during June.

80. *Hirundo erythrogaster palmeri*. WESTERN BARN SWALLOW.—Common, nests in barns and other outbuildings about Bijou and Rowlands. A rather strange nest was found at the latter place on June 19, 1902, containing four fresh eggs. It was plastered against a rafter in a small cottage, the bird gaining entrance through a small jagged hole in a windowpane.

81. *Tachycineta bicolor*. * TREE SWALLOW.—Abundant along the lake shore, especially about Rowlands, where it nests in dead trees and stumps about the marsh. A nest found at this place on June 12, 1901, was placed in a hole of a pile of an old wharf, over the water, and held six eggs in which incubation had just begun. The nest was profusely lined with feathers. On June 22, 1902, a nest was found in the same hole with five well incubated eggs and two others nearby held large young.

82. *Tachycineta thalassina*. VIOLET-GREEN SWALLOW.—Seen in August on the lakes in Glen Alpine nearly every year by Mr. Price.

83. *Vireo gilvus swainsoni*. WESTERN WARBLING VIREO.—Observed by Mr. Barlow on the Forni meadow near Pyramid Peak, altitude 7500 feet, in June, 1900.

84. *Vireo solitarius cassini*. CASSIN VIREO.—Mr. Price notes it as rare in Glen Alpine except during the early migration of the young when they are very common.

85. *Helminthophila rubricapilla gutturalis*. CALAVERAS WARBLER.—Mr. Price states it is rather common at Glen Alpine and on the slopes of Mt. Tallac to at least 8000 feet.

86. *Helminthophila celata lutescens*. LUTESCENT WARBLER.—Observed by Mr. Price to be rather common in Glen Alpine in July and August, although he states he has no evidence that it breeds.

87. *Dendroica aestiva morcomi*. WESTERN YELLOW WARBLER.— This I noted as the commonest warbler in Lake Valley. All nests I found were in pines or tamaracks, and placed rather insecurely when on the end of the branch, owing to the character of the tree, but when found in saplings the nest was placed against the trunk. One in a tamarack, 12 feet up, near Bijou, contained three well incubated eggs on June 25, 1902, and another, found on the same day, near by, held four small young, and was placed 8 feet up in a pine.

88. *Dendroica coronata hooveri*. ALASKA MYRTLE WARBLER.— I am reluctant to make observations that may be questioned, but I am reasonably sure I saw a bird of this species near Lakeside on June 26, 1902. It was a male and lit close to me on the dead limb of a pine. Unfortunately I did not have a gun with me but having that 'Audubonian' fire-arm, the field glass, I was enabled to examine the bird well. My notes, made at the time, tally with the descriptions of this bird. It had some resemblance to *Dendroica auduboni*, but the conspicuous white throat distinguished it in an instant.

89. *Dendroica auduboni*. AUDUBON WARBLER.— This highly colored warbler is, next to *Dendroica aestiva*, the most abundant species in the valley, and in some districts is even more common. A nest found with four almost fresh eggs on June 17, 1902, at Bijou, was placed 25 feet up against the main trunk of a tamarack. Another at Emerald Bay, on the lake shore, in a pine four feet up, held five eggs, four well incubated and one perfectly fresh. This was on June 27, 1902. Both sets are heavily and richly marked, as is usual with the eggs of this species. The nests are similar, of hemp fibres, fine rootlets, bits of bark, and lined very profusely with feathers, and can be distinguished by their large size from those of *D. aestiva* at a glance.

90. *Dendroica townsendi*. TOWNSEND WARBLER.— A male was shot near Gilmore Lake, on the slope of Mt. Tallac, at 8500 feet, early in August, 1900, by Mr. Chas. Merrill and is recorded by Mr. Price.

91. *Dendroica occidentalis*. HERMIT WARBLER.— Mr. Price notes it as rather rare, except late in July and early in August, about Silver Creek when the migration of the young takes place.

92. *Geothlypis tolmiei*. TOLMIE WARBLER.— Mr. Price states it is rather common up to 8000 feet, both in the Silver Creek region and on Mt. Tallac.

93. *Geothlypis trichas occidentalis*.— WESTERN YELLOW-THROAT.— Mr. Price observed a yellow-throat in the marshes about Tallac referable to this species, but secured no specimens.

94. *Wilsonia pusilla pileolata*. PILEOLATED WARBLER.— This warbler is not uncommon in the willow thickets along streams and about Rowlands. Mr. Price records it as common in Glen Alpine, where a nest, placed on the ground under a fallen aspen, at Lily Lake, was found in July, 1898, with five eggs. Mr. Barlow also saw this bird on the summit on June 14, 1901.

95. *Cinclus mexicanus*. AMERICAN DIPPER.—Rare in the valley proper but not uncommon along the turbulent streams in the mountains that surround it. On June 25, 1902, I noticed a pair of dippers and young along a small stream on the road to Star Lake.

96. *Troglodytes aëdon parkmani*. PARKMAN WREN.—Mr. Price observed this bird in Glen Alpine and shot a pair early in August, 1900, on Mt. Tallac at 8000 feet.

97. *Certhia familiaris zelotes*. SIERRA CREEPER.—Rather scarce. I noticed several pairs of these birds in groves of dead pines in marshy tracts at Rowlands.

98. *Sitta carolinensis aculeata*. SLENDER-BILLED NUTHATCH.—I saw this bird frequently on the summit in the middle of June, 1902. Also observed by Mr. C. Barlow and Mr. L. E. Taylor. Mr. Price also remarks it is common above 6000 feet on both sides of the range, at Silver Creek and about Glen Alpine.

99. *Sitta canadensis*. RED-BREASTED NUTHATCH.—Mr. Price notes it as common at Silver Creek during migrations and states it may breed there.

100. *Sitta pygmæa*. PYGMY NUTHATCH.—A family were noted on Silver Creek, at 7000 feet, in August, 1896, and several were taken by W. W. Price, who states it is possible they were migrating.

101. *Parus gambeli*. MOUNTAIN CHICKADEE.—The sprightly little chickadee is rather common about the valley and was observed up to above Star Lake, at about 9000 feet altitude. A curious nest of this bird was found on June 26, 1902, near Bijou, placed in a pine stub, the entrance being from the top of the stub running down about a foot perpendicularly. The parents were confiding little fellows, flitting back and forth with food for the five young ones notwithstanding I stood only a few feet away.

102. *Regulus satrapa olivaceus*. WESTERN GOLDEN-CROWNED KINGLET.—Mr. Taylor collected a female at Glen Alpine, Sept. 19, 1901.

103. *Regulus calendula*. RUBY-CROWNED KINGLET.—Mr. Taylor took an adult female at Glen Alpine, Sept. 19, 1901. Mr. Price states it breeds commonly in the forests of alpine hemlock on the slopes of Pyramid Peak and at the head of Glen Alpine but that he has never succeeded in finding a nest.

104. *Myadestes townsendi*. TOWNSEND SOLITAIRE.—Mr. Taylor collected four specimens at Glen Alpine Springs in September, and one at Meyer's Station, Oct. 7, 1901.

105. *Hylocichla ustulata*. RUSSET-BACKED THRUSH.—A single record. Mr. H. R. Taylor found a nest at Echo just west of the summit (altitude 5700 feet), June 16, 1902, with four eggs, placed in a small dense fir tree in a meadow.

106. *Hylocichla aonalaschkæ sequoiensis*. SIERRA HERMIT THRUSH.—I have never noticed this bird on the floor of the valley but as soon as the ascent of the mountain sides is commenced the song is heard. The

bird is nowhere so abundant as about Phillip's Station, on the summit. Here this peerless singer was heard occasionally through the day but more often at dusk. I found a nest, built principally of rootlets, placed in a small tamarack 6 feet up, along the road east of Phillip's Station on July 3, 1902. It contained three rather pale blue eggs in which incubation had just begun. I discovered two other nests the same day, one along the road, 6 feet up in a tamarack, with four small young; the other was found deep in the woods, artfully placed among the branches of a dead tamarack, and held four large young. In the last two cases the parents were reluctant to leave the nest, and hopped about the branches near by, showing great anxiety and settled down on the nest immediately after we left.

107. *Merula migratoria propinqua*. WESTERN ROBIN. — As usual in the Sierras the robin was the most common bird of its size, in Lake Valley as well as up to 8000 feet altitude. It begins to lay in the Lake Valley about the first of June, and a little later or earlier at other points, according to the altitude.

108. *Hesperocichla nævia*. VARIED THRUSH. — Mr. Price collected a specimen on Silver Creek, Oct. 1, 1896.

109. *Sialia arctica*. * MOUNTAIN BLUEBIRD. — Very common in Lake Valley. I found nine nests one day on a ramble near Bijou, all placed in dead trees or stumps, from 3 to 15 feet up. After the first week in June nests contained partly incubated eggs, although an occasional late nest was found. The Western Robin, Western Chipping Sparrow and the Mountain Bluebird are the three commonest birds in the pine woods, and although the latter is last on this list it is by no means the least interesting bird in the region.

FOOD HABITS OF SOME WEST INDIAN BIRDS.

BY B. S. BOWDISH.

SO FAR as I have noticed, few writers have given much attention to the extent to which many birds of families which in the States are considered more or less strictly insectivorous, feed in the West Indies largely on fruit and seeds.

In 'The Auk' for October, 1902, Mr. John Grant Wells mentions *Vireo calidris* as feeding more or less on small red berries, and occasional mention of other cases may be found.

In Porto Rico the woodpecker, *Melanerpes portoricensis*, forms